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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,183	09/24/2003	Hans-Werner Riel	RIEL1	4032
1444	7590	12/15/2005	EXAMINER	
BROWDY AND NEIMARK, P.L.L.C. 624 NINTH STREET, NW SUITE 300 WASHINGTON, DC 20001-5303			KING, BRADLEY T	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/668,183	<b>Applicant(s)</b> RIEL ET AL.	
	<b>Examiner</b> Bradley T. King	<b>Art Unit</b> 3683	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6,8,10 and 12-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-6,8,10 and 12-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 8/9/2005 and 9/08/2005 have been entered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claims 1-41 require a valve which opens only when the overcoming force is within a claimed range. It is not clear from the disclosure how both upper and lower bounds can be achieved with the disclosed structure. It is not clear how, once open in response to a force, the valve would once again close in response to greater force. The

Art Unit: 3683

claimed range also covers negative forces (the push in direction). It is not clear how the disclosed structure is capable of achieving this. It would appear that the valving would need to be arranged on the opposite side of the piston. The claims also require the valve to be biased closed. Some of the force relations covered by the range would appear to require the valve to be open.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 17 recite "an automatic additional valve" or "an additional automatic valve". It is not clear how the automatic valve is an "additional" automatic valve as no automatic valve has been previously recited. Several of the dependent claims also recite "said automatic valve". It is not clear if this is the same valve or an additional valve.

Claims 1-6, 8, 10, and 12-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1101972 in view of May (US# 5259294).

EP 1101972 discloses a gas spring including; a casing 1, which is filled with a free-flowing pressure fluid and has a central longitudinal axis; a guide and seal unit, which closes a first end of the casing 1; a piston rod 8, which has an outer end and is

Art Unit: 3683

sealingly extended through the guide and seal unit out of the first end of the casing 1; a piston 13, which is connected to the piston rod 8 and sealingly guided in the casing 1; a pressure-fluid-filled first sectional casing chamber 4, which is unilaterally defined by the piston 13; an energy accumulator 3 for exercising pressure on the pressure fluid; a pressure-fluid-filled second sectional casing chamber 5, which is connectable to the first sectional casing chamber 4; and a controllable valve 11 for interconnection of the sectional casing chambers by an actuation/overflow assembly, the valve having a valve pin 16, which is movable from outside the casing into an open position of the controllable valve and into a shut-off position; wherein an automatic valve 18 for interconnection of the sectional casing chambers by an automatic overflow connection 19, the automatic valve comprising a valve element 21, which is pre-loaded in a shut-off position such that, in the valve-pin shut-off position of the controllable valve, opening the automatic valve into an open position takes place only when an overcoming force  $F_1$  works between the piston rod and the casing in a piston rod push-out direction (as broadly recited). EP 1101972 lacks explicit disclosure of the relation of the force  $F_1$  to the spring push-out force as required by the claim. It would have been obvious to one of ordinary skill in the art at the time the invention was made to determine the appropriate forces for the valving through routine design and/or experimentation to achieve the desired spring and operating characteristics of the device, thereby providing the desired spring force, behavior and proper overload protection. Also note *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Also note the 112 1<sup>st</sup> rejections above. EP 1101972 further lack the saucer spring groove structure of claims 1 and 17

or the self preloaded annular disc of claim 29. Self-biased disc springs received in grooves are well known in the art and further demonstrated by May (note the groove formed by the rod and nut). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the valve structure as known and further demonstrated by May in place of the spring and disc combination of EP 1101972 as an obvious design alternative which allows a reduction in parts and therefore simplification of assembly.

Regarding claims 4, 17 and 32, the valve body is illustrated as a composite body with a non-metallic layer. Note the disclosure further defines the element as a gasket, implying a soft, sealing material.

Regarding claims 5-6, 20-21 and 33-34, EP 1101972 lacks the explicit disclosure of the materials for the composite valve. The examiner takes official notice that metal substrates and plastic or rubber materials are well known in valve design. It would have been obvious to one of ordinary skill in the art at the time the invention was made to select a metal substrate and a plastic or rubber layer for the materials of the composite valve body of EP 1101972 as a routine part of engineering design and material selection, thereby providing appropriate valve stiffness and ensuring proper sealing of the flow passages.

### ***Response to Arguments***

Applicant's arguments filed 8/09/2005 and 9/08/2005 have been fully considered but they are not persuasive.

Regarding EP 1101972, please note the new rejection set forth above.

Regarding the statement of Official Notice, Applicant's arguments do not point and any specific supposed errors of the statement. Since the statement has not been adequately traversed, it has been taken as admitted prior art. Note MPEP 2144.03C.

Applicant's declarations have been considered, however it is maintained that Applicant has failed to show any criticality to the claimed ranges or unexpected results. It is also not clear what considerations the declarations are directed towards.

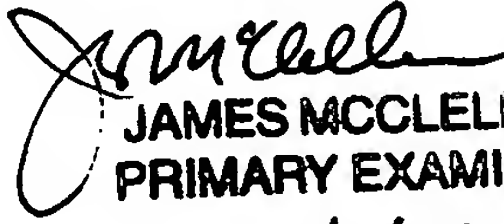
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T. King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571) 272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTK

  
JAMES MCCLELLAN  
PRIMARY EXAMINER  
12/12/05